

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/002920

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C12Q1/02, C12N5/10, G01N33/50, G01N33/15,  
 C12N15/10, A61K45/00, A23L1/48 // (C12N5/10, C12R1:91),  
 (C12N15/12, C12R1:91)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C12N1/00-15/90, C12Q1/00-70, G01N33/00-98, A61K31/00-48/00,  
 A61P1/00-43/00, A23L1/00-48

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

MEDLINE (STN), WPI (DIALOG), BIOSIS (DIALOG),  
 GenBank/EMBL/DDBJ/GeneSeq, SwissProt/PIR/GeneSeq

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2002/06482 A1 (KAGAKU GIJUTSU SHINKO JIGYODAN), 24 January, 2002 (24.01.02), & JP 2002-034565 A & EP 1302541 A1 & US 2003/0124655 A1	1-21
A	Fumihiro Takeshita et al., "Role of Toll-Like Receptor 9 in CpG DNA-Induced Activation of Human Cells.", The Journal of Immunology, Vol.167, (2001), pages 3555 to 3558	1-21
A	Hemmi H. et al., "A Toll-like receptor recognizes bacterial DNA.", Nature, Vol.408, No.6813, (2000), pages 740 to 745	1-21

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"E" earlier application or patent but published on or after the international filing date

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"O" document referring to an oral disclosure, use, exhibition or other means

"&" document member of the same patent family

"P" document published prior to the international filing date but later than the priority date claimed

Date of the actual completion of the international search  
14 April, 2004 (14.04.04)Date of mailing of the international search report  
11 May, 2004 (11.05.04)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Marc Bauer et al., "Bacterial CpG-DNA Triggers Activation and Maturation of Human CD11c-, CD123+Dendritic Cell.", The Journal of Immunology, Vol.166, (2001), pages 5000 to 5007	1-21
A	Imaeda H. et al., "In vivo response of neutrophils and epithelial cells to lipopolysaccharide injected into the monkey ileum.", Histochem.Cell Biol., Vol.118, No.5, (2002), pages 381 to 388	1-21

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**Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item I.b of the first sheet)**

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material
    - in written format
    - in computer readable form
  - c. time of filing/furnishing
    - contained in the international application as filed
    - filed together with the international application in computer readable form
    - furnished subsequently to this Authority for the purposes of search
2.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments: